In the Claims:

1. (Withdrawn) A method for vector descriptor representation and multimedia data retrieval, the method comprising:

a quantization step of quantizing a plurality of feature values described by a vector descriptor respectively;

a bit representation step of representing each of the quantized feature values in the form of bit;

a bit rearrangement step of rearranging the feature values represented in the form of bit from the highest bit to the lowest bit and representing the vector descriptor hierarchically;

a variable-length coding step of coding in variable length and storing the rearranged feature values and the number of feature values which are input;

a variable-length inversely coding step of inversely coding only the feature values corresponding to the number of the feature values of the stored feature values;

a bit inverse arrangement step of inversely arranging the inversely coded feature values and restoring to original feature values;

an inverse quantization step of inversely quantizing the restored feature values; and

a comparison step of comparing the feature values restored by the inverse quantization with the feature values stored in a multimedia database and retrieving multimedia data.

2. (Original) A method for vector descriptor representation and multimedia data retrieval, the method comprising:

an orthogonal transformation step of orthogonally transforming feature values described by a vector descriptor;

a feature value representation step of representing the transformed feature values from low frequency feature to high frequency feature;

a quantization step of quantizing the feature values represented in the feature value representation step;

a variable-length coding step of variable-length coding and storing the quantized feature values and the number of feature values which are input;

a variable-length inversely coding step of extracting the feature values corresponding to the number of the feature values of the stored feature values and inversely coding the extracted feature values;

an inverse quantization step of inversely quantizing the feature values inversely coded;

an inversely orthogonal transformation step of inversely and orthogonally transforming the inversely quantized feature values and restoring to original feature; and

a comparison step of comparing the restored feature values with feature values stored in a multimedia database and retrieving multimedia data.

3. (Original) The method as claimed in claim 2, wherein the orthogonal transformation in the orthogonal transformation step uses DCT (Descrete Cosine Transform).

4. (Original) The method as claimed in claim 2, wherein the orthogonal transformation in the orthogonal transformation step uses DST (Discrete Sine Transform).

5. (Original) The method as claimed in claim 2, wherein the orthogonal transformation in the orthogonal transformation step uses DFT (Discrete Fourier Transform).

6. (Original) The method as claimed in claim 2, wherein the orthogonal transformation in the orthogonal transformation step uses Haar

7. (Original) The method as claimed in claim 2, wherein the orthogonal transformation in the orthogonal transformation step uses Wavelet.

8. (Original) The method as claimed in claim 2, wherein the inversely orthogonal transformation in the inversely orthogonal transformation step uses inverse DCT.

9. (Original) The method as claimed in claim 2, wherein the inversely orthogonal transformation in the inversely orthogonal transformation step uses inverse DST.

10. (Original) The method as claimed in claim 2, wherein the inversely orthogonal transformation in the inversely orthogonal transformation step uses inverse DFT.

11. (Original) The method as claimed in claim 2, wherein the inversely orthogonal transformation in the inversely orthogonal transformation step uses inverse Haar.

12. (Original) The method as claimed in claim 2, wherein the inversely orthogonal transformation in the inversely orthogonal transformation step uses inverse Wavelet.

13. (Withdrawn) An apparatus for vector descriptor representation and multimedia data retrieval, the apparatus comprising:

a quantization unit for quantizing a plurality of feature values described by a vector descriptor respectively;

a bit representing unit for representing each of the quantized feature values in the form of bit;

a bit rearranging unit for rearranging the feature values represented in the form of bit from the highest bit to the lowest bit and representing the vector descriptor hierarchically;

a variable-length coding unit for coding in variable length and storing the rearranged feature values and the number of feature values which are input;

a variable-length inversely coding unit for inversely coding only the feature values corresponding to the number of the feature values of the stored feature values;

a bit inverse arranging unit for inversely arranging the inversely coded feature values and restoring to original feature values;

an inverse quantization unit for inversely quantizing the restored feature values; and

a comparing unit for comparing the feature values restored by the inverse quantization with the feature values stored in a multimedia database and retrieving multimedia data.

14. (Original) An apparatus for vector descriptor representation and multimedia data retrieval, the apparatus comprising:

an orthogonal transformation unit for orthogonally transforming feature values described by a vector descriptor;

a feature value representing unit for representing the transformed feature values from low frequency feature to high frequency feature;

a quantization unit for quantizing the feature values represented in the feature value representation step;

a variable-length coding unit for variable-length coding and storing the quantized feature values and the number of the feature values which are input;

a variable-length inversely coding unit for extracting the feature values corresponding to the number of the feature values of the stored feature values and inversely coding the extracted feature values;

an inverse quantization unit for inversely quantizing the feature values inversely coded;

an inversely orthogonal transformation unit for inversely and orthogonally transforming the inversely quantized feature values and restoring to original feature; and

a comparing unit for comparing the restored feature values with feature values stored in a multimedia database and retrieving multimedia data.

15. (Original) The apparatus as claimed in claim 14, wherein the orthogonal transformation in the orthogonal transformation unit uses DCT (Descrete Cosine Transform).

16. (Original) The apparatus as claimed in claim 14, wherein the orthogonal transformation in the orthogonal transformation unit uses DST (Discrete Sine Transform).

17. (Original) The apparatus as claimed in claim 14, wherein the orthogonal transformation in the orthogonal transformation unit uses DFT (Discrete Fourier Transform).

18. (Original) The apparatus as claimed in claim 14, wherein the orthogonal transformation in the orthogonal transformation unit uses Haar

19. (Original) The apparatus as claimed in claim 14, wherein the orthogonal transformation in the orthogonal transformation unit uses Wavelet.

20. (Original) The apparatus as claimed in claim 14, wherein the inversely orthogonal transformation in the inversely orthogonal transformation unit uses inverse DCT.

21. (Original) The apparatus as claimed in claim 14, wherein the inversely orthogonal transformation in the inversely orthogonal transformation unit uses inverse DST.

22. (Original) The apparatus as claimed in claim 14, wherein the inversely orthogonal transformation in the inversely orthogonal transformation unit uses inverse DFT.

23. (Original) The apparatus as claimed in claim 14, wherein the inversely orthogonal transformation in the inversely orthogonal transformation unit uses inverse Haar.

24. (Original) The apparatus as claimed in claim 14, wherein the inversely orthogonal transformation in the inversely orthogonal transformation unit uses inverse Wavelet.